REMARKS

The Office Action of May 17, 2005 has been reviewed and the Examiner's comments carefully considered. Claims 13-15 and 17 have been canceled. Claims 12, 16 and 24-26 have been amended. Support for the language added to claims 12, 16 and 24-26 is found in canceled claim 17. No new matter has been added. In view of these amendments and of the following remarks, Applicants believe that all the asserted rejections are in condition for withdrawal and all of pending claims 12, 16 and 18-26 are in condition for allowance.

Claim 15 stands objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form for not further limiting the subject matter of a previous claim. Claim 15 has been canceled and, therefore, this objection may be withdrawn.

Claims 12, 13-16, 19-22, 25 and 26 stand rejected under 35 U.S.C. § 103(a) for purported unpatentability over Jorgensen et al. in view of Clausen; claims 17 and 24 stand rejected under 35 U.S.C. § 103(a) for purported unpatentability over Jorgensen et al. as modified by Clausen in view of Baron et al.; and claims 18 and 23 stand rejected under 35 U.S.C. § 103(a) for purported unpatentability over Jorgensen et al. as modified by Clausen in view of Schnuda. The Examiner makes the following assertions, in pertinent part: that for claims 12, 13-16, 19-22, 25 and 26, although Jorgensen et al. as modified by Clausen is silent about various capacities or amounts of an ion-exchange agent used, it would be obvious to use an ion-exchange agent with at least about 15 meq/100g dry weight wherein the ion-exchange agent is present in a maximum amount of 20 volume % in the substrate of Jorgensen et al. as modified by Clausen; that for claim 17, it would be obvious to employ zeolite as taught by Baron et al. in the substrate of Jorgensen et al. as modified by Clausen in order to improve capillarity; that for claim 24, because Baron et al. disclose zeolite, it should display a stable cage-like structure because it is the same zeolite as the claimed invention; and that for claims 18 and 23, although Jorgensen et al. as modified by Clausen are silent about peat, Schnuda teaches a growth medium or substrate in which peat is used together with mineral wool in the medium to provide a higher water retention medium.

Claim 12 has been amended to recite the features of canceled claim 17, namely, that the ion-exchange agent is comprised of a zeolite. The key inventive concept of

the claimed invention inheres in the new and unexpected finding that a mineral wool substrate comprised of a zeolite ion-exchange agent provides new and unexpected properties to the mineral wool substrate, due to the stable, cage-like structure of the zeolite ion-exchange agent which offers an ideal, stable habitat for micro-organisms and exhibits a non-clay like behavior with respect to swelling and shrinking (page 4, lines 17-20).

Applicants submit that the new and unexpected characteristics of the claimed invention are neither taught nor suggested, either alone or in combination, by Jorgensen et al., Clausen, Baron et al. or Schnuda. Applicants further submit that one skilled in the art would not be motivated to identify the claimed invention based on the disclosures of Jorgensen et al. modified by Clausen in view of the general disclosure of Baron et al. because Baron et al. do not disclose a plant substrate comprising mineral wool (col. 3, line 9) and zeolite (col. 3, line 7) but, rather, disclose a plant substrate comprising super absorbent particles, which plant substrate may further comprise particles or fibers in which zeolite merely is mentioned in a long list of particles that also include clay, bentonite, natural fibres such as ligneous or cellulose fibres, or synthetic fibres such as textile fibres, mineral wool, etc. The specifically claimed zeolite-containing invention is thus neither taught nor suggested.

Additionally, Baron et al. disclose a completely different plant growth substrate that, for example, is not form stable under wet conditions (as previously elaborated in detail in the previously submitted expert's Declaration by Anton Blaakmeer). Furthermore, the mineral wool fibers disclosed by Baron et al. are not cured by a binder so as to fix the mineral wool fibers to one another so that they are substantially not displaceable relative to one another. Finally, one skilled in the art would not identify the claimed invention by the teaching of Jorgensen et al. as modified by Clausen et al. because one would not be motivated to use zeolite in the substrate of Jorgensen et al. as modified by Clausen et al. in order to improve capillarity. Applicants submit that the teaching of Jorgensen et al. as modified by Clausen et al. provides no incentive for the skilled artisan to improve capillarity, as Jorgensen et al. is directed at improving water-wettability (page 2, lines 116-123), and Clausen et al. is directed at improving water retention properties (page 3, lines 8-12). Having said that, the key is still to appreciate that none of the prior art teaches or suggests the specific choice of zeolite or the benefits zeolite provides.

Based on the foregoing amendments and remarks, Applicants respectfully submit that claims 12, 16 and 18-26 now are patentable and in condition for allowance. Reconsideration of the rejections and allowance of claims 12, 16 and 18-26 are respectfully requested.

Respectfully submitted,

THE WEBB LAW FIRM

By _____

Gwen R. Wood, Ph.D.
Registration No. 51,027
Attorney for Applicants
700 Koppers Building
436 Seventh Avenue
Pittsburgh, Pennsylvania 15219-1845
Telephone: 412-471-8815
Facsimile: 412-471-4094